IN THE CLAIMS

Kindly amend claims 3, 4, 7, 9, 10, 12, 15, 16, 21, and 24, add new claims 28-30, and delete claims 1, 2, 8, 14 and 25-27 without prejudice to, or disclaimer of, the subject matter therein. Much of the subject matter of the cancelled claims has been placed into new claims 28-30.

The following is a complete listing of revised claims with a status identifier in parenthesis.

LISTING OF CLAIMS

1.   (Cancelled)

2.   (Cancelled)

3.   (Currently Amended)   The method of ~~claim 2~~ claim 29, including directing information to the home agent concerning a current location of the mobile host from a base station that receives the page response from the mobile host.

4.   (Currently Amended)   The method of ~~claim 2~~ claim 29, including buffering the data addressed to the mobile host at the home agent when the host is in [[the]] a standby state.

5.   (Currently Amended)   The method of claim 4, including delivering the data buffered at the home agent to the mobile host when the host transitions to [[the]] an active state.

6.   (Original)   The method of claim 5, including delivering data later received at the home agent and destined to the mobile host, to the mobile host while the host is in the active state.

7.   (Currently Amended)   The method of ~~claim 2~~ claim 29, including directing the page request from the home agent to the base stations according to a selected one of a fixed paging algorithm, a hierarchical paging algorithm, or a last-location paging algorithm.

8.   (Cancelled)

9.   (Currently Amended)   The method of ~~claim 8~~ claim 30, including designating a last serving base station in the paging area for the mobile host as a last foreign agent, and buffering the tunneled data from the home agent at the last foreign agent.

10.   (Currently Amended)   The method of claim 9, including initiating the page request from the last foreign agent, and directing the page request to at least one of the base stations in the paging area of the host.

11.   (Original)   The method of claim 10, including transmitting to the home agent a current location of the mobile host from a base station that receives the page response from the host, and designating the base station that receives the page response as a current foreign agent.

12.   (Currently Amended)   The method of claim 11, including delivering the data buffered at the last foreign agent to the mobile host through the current foreign agent, when the mobile host transitions to [[the]] an active state.

13.   (Original)   The method of claim 10, including directing the page request from the last foreign agent to the base stations according to a selected one of a fixed paging algorithm, a hierarchical paging algorithm, or a last-

location paging algorithm.

14.   (Cancelled)

15.   (Currently Amended)   The method of ~~claim 14~~ claim 28, including periodically advertising the identity of the domain root router in all paging areas of an associated domain.

16.   (Currently Amended)   The method of ~~claim 14~~ claim 28, including initiating the page request from a page initiator comprising a router or a base station along a path between the domain root router and the last-serving base station in the paging area for the mobile host.

17.   (Original)   The method of claim 16, including buffering data addressed to the mobile host at the page initiator when the host is in the standby state.

18.   (Original)   The method of claim 16, including sending the page response from the mobile host to the page initiator thereby updating the routing information concerning the mobile host.

19.   (Original)   The method of claim 18, including delivering the data buffered at the page initiator to the mobile host when the host transitions to the active state, according to the updated routing information.

20.   (Original)   The method of claim 16, including directing the page request from the page initiator to the base stations according to a selected one of a fixed paging algorithm, a hierarchical paging algorithm, or a last-location paging algorithm.

21.   (Currently Amended)   A method of operating a mobile host for linking with an Internet protocol (IP) network, comprising:

configuring the mobile host for assuming a selected one of an active state and a standby state;

informing certain nodes of the network of a change of the host's point of attachment with the network from one base station to another base station when the host is in the active state, wherein the network has paging areas each of which includes one or more base stations;

informing the nodes only when a new point of attachment with the network is a base station of a paging area different from a paging area of a last point of attachment with the network, when the host is in the standby state;

responding to a page request received from one or more base stations [[of]] within a current paging area of the host when in the standby state, said request originating at a home agent or a base station acting as a tunneled foreign agent, by transmitting a page response for reception by one of the base stations and transitioning to the active state; and

receiving data from one of the base stations which data was addressed to the mobile host while the host was in the standby state.

22.   (Original)   The method of claim 21, including conserving battery power at the mobile host when the host is in the standby state.

23.   (Original)   The method of claim 21, including transitioning from the active state to the standby state after a determined time out interval in the absence of data exchanged between the mobile host and the network.

24. (Currently Amended) ~~[[A]]~~ The method as in claim 28 ~~of paging~~

~~mobile hosts associated with an Internet protocol (IP) network,~~ comprising:

~~coupling base stations to the IP network to define paging areas each of~~

~~which has one or more associated base stations;~~

~~configuring at least one mobile host for assuming a selected one of (i) an~~

~~active state wherein the mobile host operates to inform certain nodes of the~~

~~network of a change of the host's point of attachment with the network from~~

~~one base station to another base station, and (ii) a standby state wherein the~~

~~mobile host informs the nodes only when a new point of attachment with the~~

~~network is a base station of a paging area different from a paging area of a last~~

~~point of attachment with the network;~~

~~initiating a page request for the mobile host at a given node of the~~

~~network when data on the network is addressed to the host and the host is in~~

~~the standby state;~~

~~delivering the page request to the mobile host by directing the request to~~

~~one or more base stations within a current paging area for the host, and~~

~~transmitting the request from one or more base stations in the current paging~~

~~area;~~

configuring the mobile host to respond to the page request when in the

standby state by transmitting a page response for reception by a base station

in the paging area~~[[;]]~~.

~~developing updated routing information for the mobile host from the page~~

~~response transmitted by the host; and~~

~~delivering the data addressed to the mobile host according to the~~
~~updated routing information developed for the host.~~

25.   (Cancelled)

26.   (Cancelled)

27.   (Cancelled)

28.   (New) A method of paging mobile hosts over an Internet protocol (IP) network comprising:

coupling base stations to the IP network wherein one or more base stations define associated paging areas;

initiating a page request for a mobile host at a given node of the network when the data on the network is addressed to the host;

receiving the data addressed to the mobile host at a home agent on the network;

defining a domain root router along a path on the network between the home agent and a current paging area for the mobile host;

sending update messages to the domain root router from the mobile host: (i) when the host detaches from one base station and re-attaches to another base station while the host is in an active state; and (ii) only when the host re-attaches to a base station outside the current paging area while the host is in a standby state, thereby developing routing information concerning the mobile host at each node in a path between a last-serving base station for the mobile host and the domain root router;

receiving a page response from the mobile host; and

delivering the data to the mobile host according to the routing information.

29.   (New) A method of paging mobile hosts over an Internet protocol (IP) network comprising:

coupling base stations to the IP network wherein one or more base stations define associated paging areas;

receiving data addressed to a mobile host at a home agent on the network;

initiating a page request from the home agent;

directing the page request from the home agent to at least one of the base stations in a current paging area of the mobile host;

receiving a page response from the mobile host at a base station in the current paging area; and

delivering the data addressed to the mobile host.

30.   (New) A method of paging mobile hosts over an Internet protocol (IP) network comprising:

coupling base stations to the IP network wherein one or more base stations define associated paging areas;

receiving data addressed to a mobile host at a home agent on the network;

tunneling the data from the home agent to a designated foreign agent on the network;

receiving a page response from the mobile host at a base station in the

current paging area of the host; and

delivering the data addressed to the mobile host.